United States Patent and Trademark Office

10/15/2003

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IOTICE OF ALLOWANCE AND FEE(S) DUE

Pauley Petersen Kinne & Erickson Suite 365 2800 W. Higgins Road Hoffman Estates, IL 60195

EXAMINER

NUTTER, NATHAN M

ART UNIT 1711

PAPER NUMBER

DATE MAILED: 10/15/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,841	12/21/2001	James Hongxue Wang	KCC-14,764	4657

TITLE OF INVENTION: MICROPHASE SEPARATED SUPERABSORBENT COMPOSITIONS AND METHOD FOR MAKING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	01/15/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

ART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Page 1 of 4

PTOL-85 (Rev. 10/03) Approved for use through 04/30/2004 \fit

DOCKETED ATTORNEY



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,841	12/21/2001	James Hongxue Wang	KCC-14,764	4657
759	90 10/15/2003		EXAM	INER
Pauley Petersen K	Linne & Erickson		NUTTER, N	ATHAN M
Suite 365 2800 W. Higgins Re	oad		ART UNIT	PAPER NUMBER
Hoffman Estates, II			1711	
			DATE MAILED: 10/15/2003	3

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 236 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 236 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

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E	Application No.	Applicant(s)	
Notice of Allowability	10/036,841	WANG ET AL.	
	Examiner	Art Unit	
	Nathan M. Nutter	1711	
The MAILING DATE of this common apper All claims being allowable, PROSECUTION ON THE MERITS IS therewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIPORT OF THE MERITS IS the Office or upon petition by the applicant. See 37 CFR 1.313 1. This communication is responsive to 2. The allowed claim(s) is/are 37-67. 3. The drawings filed on 15 April 2002 are accepted by the Extended at the priority document is made of a claim for foreign priority under a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have 3. Acknowledgment is made of a claim for domestic priority under 1. Acknowledgment is made of a claim for domestic priority under Acknowledgment is made of a claim for domestic priority under Acknowledgment is made of a claim for domestic priority under Acknowledgment is made of a claim for domestic priority under Acknowledgment is made of a claim for domestic priority under Acknowledgment is made of a claim for domestic priority under Acknowledgment is made of a claim for domestic priority under Acknowledgment is made of a claim for domestic priority under Acknowledgment is made of a claim for domestic priority under Acknowledgment is made of a claim for domestic priority under Acknowledgment Ack	Nathan M. Nutter ars on the cover sheet with the (OR REMAINS) CLOSED in this or other appropriate communication or the application is subject and MPEP 1308. caminer. er 35 U.S.C. § 119(a)-(d) or (f). been received. been received in Application Not the application has been received in the application has been received. ander 35 U.S.C. § 119(e) (to a proposition of the application has been received. ander 35 U.S.C. § 120 and/or 120	Art Unit 1711 correspondence addrapplication. If not includition will be mailed in due to withdrawal from issurts of the withdrawal from its of the withdrawal from its of the withdrawal from the withdrawal f	course. THIS le at the initiative tion from the irements noted EXTENDABLE. NOTICE OF
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1⊠ Notice of References Cited (PTO-892) 3□ *'-tice of Draftperson's Patent Drawing Review (PTO-948) 5□ rmation Disclosure Statements (PTO-1449), Paper No. 1- 7□ Examiner's Comment Regarding Requirement for Deposit of Biological Material	4∏ Interview Sun 6⊠ Examiner's A	rmal Patent Application (Inmary (PTO-413), Paper mendment/Comment tatement of Reasons for a	No

Application/Control Number: 10/036,841

Art Unit: 1711

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-36, drawn to a superabsorbent composition having a glass transition temperature higher than the temperature of use; and an elastomer having a glass transition temperature lower than the temperature of use in a two-phase composition, classified in class 525, subclasses 191, 221, 222, 232 and 241.
- II. Claims 37-67, drawn to a macroporous superabsorbent film, comprising: 65%-92% by weight of a superabsorbent material; and 8%-35% by weight of an elastomer derived from latex emulsion; wherein the macroporous superabsorbent film having a two-phase morphology wherein the superabsorbent material is in a first phase and the elastomer derived from latex is in a second phase, classified in class 525, subclasses 221,222, 232, 238 and 241, and class 264, subclasses 171.1 and 172.13.
- III. Claims 68-100, drawn to a method for producing a superabsorbent composition, classified in class 525, subclasses 50+.

The inventions are distinct, each from the other because:

Inventions of Group I and of Group II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP §

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806.04(h)). In the instant case, the intermediate product is deemed to be useful as a molding composition suitable to produce fibers, pellets or particles, and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions of Group I and of Group III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process can be used to make other and materially different products, such as crosslinked latex films of styrene and butadiene.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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During a telephone conversation with Mark Swanson by Examiner Chang on 16 September 2003 a provisional election was made with traverse to prosecute the invention of Group II, claims 37-67. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-36 and 68-100 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: No prior art has been found nor presented that either teaches or fairly suggests the manufacture of a macroporous superabsorbent film, comprising: 65%-92% by weight of a superabsorbent material; and 8%-35% by weight of an elastomer derived from latex emulsion; wherein the macroporous superabsorbent film having a two-phase morphology wherein the superabsorbent material is in a first phase and the elastomer derived from latex is in a second phase, as herein recited and claimed. The references to Rezai et al ('074), cited by applicants, and Korpman, newly cited, are retained of interest. Neither reference is deemed to negate the patentability of the instant claims. both patents teach the production of superabsorbents that may contain elastomer

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phases. However, neither teaches the compositional limitations recited and claimed

herein. Note the Abstracts of each patent. Since there are no other outstanding issues

with regard to the clarity or enablement of the claims, these claims are deemed to

contain allowable subject matter.

Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Maxwell J. Peterson on 26 September 2003.

The application has been amended as follows:

In the claims:

Cancel claims 1-36 and 68-100.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 703-308-2443. The examiner can normally be reached on Monday-Friday 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 703-308-2462. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Nathan M. Nutter Primary Examiner Art Unit 1711 Page 6

nmn 26 September 2003

FORM PTO-1449 (MODIFIED)	FORM PTO-1449 (MODIFIED) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE KCC-14,764 SERIAL NO. 10/036,841							
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m	AA	4,861,539	08/1989	Allen et al.				
m	АВ	5,102,597	04/1992	Roe et al.	,—			
m	AC	5,324,561	06/1994	Rezai et al.	_			
m	AD	5,364,382	11/1994	Latimer et al.				
m	AE	5,490,846	02/1996	Ellis et al.				
w	AF	5,904,675	05/1999	Laux et al.				
m	AG	4,117,184	09/1978	Erickson et al.				
~	АН	4,449,977	05/1984	Korpman				
~~	Al	4,818,600	04/1989	Braun et al.	€ ;			
~~	AJ	5,128,087	07/1992	Slocum et al.			^	
~~	AK	5,139,841	08/1992	Makoui et al.				
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Sheet 1 of

FORM PTO-1449 (MODIFIED) U.S. DEPARTMENT OF COMMERCE ATTY, DOCKET NO. SERIAL NO. PATENT AND TRADEMARK OFFICE KCC-14,764 10/036,841 LIST OF PRIOR ART CITED BY APPLICANT APPLICANT(S) (Use several sheets if necessaria) James Hongxue WANG et al. FILING DATE **GROUP** 21 December 2001 **U.S. PATENT DOCUMENTS** *EXAMINER **DOCUMENT NUMBER** DATE NAME CLASS SUBCLASS **FILING DATE** INITIAL IF APPROPRIATE 5,378,528 AA 01/1995 Makoui ΑB 5,536,264 07/1996 Hsueh et al. w AC 5,728,081 03/1998 Baer et al. AD 5,763,067 06/1998 Brüggemann et al. AE 01/1999 5,859,074 Rezai et al. AF AG AH Αl AK FOREIGN PATENT DOCUMENTS **TRANSLATION DOCUMENT NUMBER** DATE COUNTRY **CLAS SUBCLAS** YES NO S AM AN AO AP OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.) AR AS **EXAMINER** DATE CONSIDERED Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. USCOMM-DC 80-3985

Sheet 2 of

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m	AA	3,650,995	03/1972	Erickson				\neg	
	AB	3,663,462	05/1972	Arndt et al.					
M	AC	3,887,408	06/1975	Ноеу					
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w	AE	3,992,333	11/1976	Emmons et al.					
w	AF	4,000,028	12/1976	Ноеу					
~	AG	4,069,366	01/1978	Hoey				\exists	
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w	Al	4,394,930	07/1983	Korpman				\exists	
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~	AK	4,486,489	12/1984	George					
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m	AA	Re. 31,822	02/1985	Erickson et al.				
~	AB	4,649,164	03/1987	Scott et al.	_			
m	AC	4,685,909	08/1987	Berg et al.	7			
m	AD	4,820,773	04/1989	Alexander et al.				
m	AE	4,902,565	02/1990	Brook				_
~	AF	4,959,060	09/1990	Shimomura et al.	7			
n	AG	5,124,188	06/1992	Roe et al.				
~	АН	5,147,345	09/1992	Young et al.				
~	AI	5,268,224	12/1993	DesMarais et al.				
~	AJ	5,318,554	06/1994	Young et al.				-
~	AK	5,328,935	07/1994	Van Phan et al.				
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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